

Multiplayer Minesweeper 50 Defects Log

Defect #	Defect	Output Before Seeding	Output After Seeding	Suggested Correction	Black/ White Box testing	Severity
1	Client does not terminate when closed	Client terminates correctly	Client still runs as a Zombie after closing	Check condition for exit	White Box	1
2	Board uncover Algorithm works oddly	Board algorithm works correctly	Board uncover algorithm may have unexpected results	Check algorithm for uncover all	Black Box	2
3	Connect Multiple people to one person	Client prompts user that someone else is connected to that person	Client that does not make a connection hangs	Make checks in the server to see if someone is connected	Black Box	2
4	Being able to play a game after losing	Client prompts you that you win/lose and board prevents further action	Client Prompts that you win/lose but you can still continue the game	Lock the Board after a win condition is satisfied	Black Box	3
5	Allowing name duplicates on the server	Client prompts user that a name is already taken	Client allows multiple names and server gets confused when connecting people	Create a condition in the server to make sure there are no duplicates present	Black Box	2

6	New game does not work properly	New game creates a new instance of Minesweeper	New game does not do anything	Check function for "New Game"	Black Box	3
7	Register does not start game	Register starts a new game	Register does something unexpected	Check registration function in client and server	White Box	3
8	No Chat message limit	Chat message length is limited	No chat limit allows for buffer overflows	Add restriction in server to truncate messages	White Box	2
9	No amount of users limit	Amount of users is limited to a certain amount	A new user over the limit wipes out the first user	create a limit of users in the server	White Box	3
10	Chat window does not scroll	Chat window works appropriately when scrolling	Chat window does not allow for scrolling	Add functionality in the server for scrolling	Black Box	1
11	Chat resize hides text fields	Chat window correctly resizes	Resizing Chat hides the text field for entering chat	Allow resizing of the chat field in the client	Black Box	1
12	Hitting a mine flags it	Hitting a mine locks that space and causes a "loss condition"	When uncovering a mine on accident, it actually flags that mine	Check functionality of left click	Black Box	3

13	board does not scale correctly	Board correctly resizes	Board does not scale when resized	Allow for scaling when generating and repaint the board	Black Box	2
14	Mine counter does not display correctly	Mine counter is accurate to the amount of mines in game	Mine counter is off by one or more	have a global counter for nummines	Black Box	2
15	Mines get uncovered on multiple uncover algorithm	Uncover Algorithm works as in traditional minesweeper	Uncover multiple spaces algorithm sometimes uncovers mines and causes you to lose	Make sure Multiple Uncover algorithm works as intended	Black Box	3
16	GUI sometimes does not appear	GUI is reliable and appears	GUI randomly decides to not show up	Make sure that the painting of the board happens each creation	Black Box	3
17	Server randomly swaps ports	Server is set up on one port	Server port is not static and changes when started	Make the server port static	White Box	2
18	Bomb placement is not always random	Bomb placement has its own random placement function	Bomb placement can be in weird places not random	Create a way to check that bomb placement occurred correctly	Black Box	2

19	Randomly GUI “runs away”	GUI stays put	GUI runs away when your mouse gets near it randomly	Take away code added for this function	Black Box	3
20	Toolbar functions are reversed	Toolbar Functions are accurate to their names	Toolbar functions	Check to see that functions are not reversed for toolbar functions	Black Box	2
21	Victory can be achieved without uncovering all bombs	Victory is only complete after flagging all bombs in play	The victory message sometimes appears	Have more conditions for victory conditions	Black Box	3
22	Victory text is mixed up	On victory the user finds “you won” on failure you see “You lost”	Upon winning you receive the message “you lost” and vice versa	In game logic look at labels for victory text	Black Box	1
23	Randomly 1 click will win in single player	One click does not win the game	Uncover multiple spaces algorithm uncovers all spaces sometimes	Make sure Multiple Uncover algorithm works as intended	Black Box	3
24	Uncover multiple spaces algorithm sometimes does not work at all	Uncover Multiple spaces algorithm works as in traditional minesweeper	Uncover Multiple spaces algorithm does not uncover multiple spaces	Make sure Multiple Uncover algorithm works as intended	Black Box	3

25	Exiting the program sometimes does nothing	Exiting the program works normally	Exiting the program does nothing on occasion	Check exit condition in the client	Black Box	2
26	Chat does not work on occasion	Sending a chat message reliably sends the message to the server	Sending a chat message does not send it to the server sometimes	Create conditions to make sure you are connected to the server	Black Box	2
27	chat name does not show up	Chat names are displayed next to your message	Chat names are invisible	Send the username to the client to be painted as well as the message	Black Box	2
28	Sometimes you are routed to yourself in multiplayer	You cannot play yourself in our version of the game	You are able to connect to yourself and play yourself	Create conditions to allow this not to happen	White Box	3
29	connecting to someone exits the game in some circumstances	Connecting to someone in our version allows you to play them	Connecting to someone quits the game on occasion	Make sure there are no random function calls in connect	White Box	3
30	game exits if you connect to someone that is not there	You are unable to connect to someone who is not there	when connecting to an invalid user the game exits	Create conditions to not allow this to happen	Black Box	2

31	Sometimes the board contains no mines	Board always contains the same amount of mines	Board generation occasionally skips mine generation	Check the board generation algorithm and make sure mines are initialized correctly	Black Box	3
32	sometimes you can "Hijack" an opponent's board	There is no way to play your opponent's board	You can play on an opponent's board	Lock the opponent's board	White Box	2
33	Right and left clicks become reversed in some situations	Right click always flags a bomb and left click always uncovers	Right and left clicks can become reversed	Check conditions for Right and Left Click	Black Box	3
34	Board is locked sometimes	Board is only locked on a win or lose condition	Board randomly locks up and doesn't allow input	Trace code to see where this occurs and edit lines around occurrence	White Box	3
35	I and J are swapped in creation of the board	Board generates correctly	Board is created backwards randomly	Swap them Back in board generation	White Box	1
36	If you have 4 mines you get an infinite loop of you win/lose	There are no infinite loops that allow this to happen	When 4 mines are present you get an infinite loop of win conditions	Take out code added for this defect	White Box	2

37	Resize after minimizing makes the board disappear	Resize works as intended	Resizing the board makes the board disappear completely	Allow Resizing the board and repaint afterwards	Black Box	2
38	Restart button does not restart the game	Restart Button works as intended	Restart button does nothing	Check function for restart to make game restart	Black Box	3
39	Can flag all spaces, even ones already uncovered	Can only flag blue spaces that have not been uncovered yet	Can flag all spaces including the ones that are already uncovered	Add a condition in flagging to see if it is an unclicked space	Black Box	3
40	Server thinks you're connected to a player when you disconnect	Terminates connection to the server on exit	Disconnect does not always work and keeps you connected	Make sure disconnect function works correctly	White Box	2
41	if you close gui after a game you can still be connected to a player	Terminates connection to the server on exit	Closing your gui after connecting keeps you connected	Make Closing the gui should disconnect from server	White Box	2
42	New game does not disconnect players, boards become out of sync	New game disconnects players from one another	After connected to an opponent, you can press new game and the boards get out of sync	Make New game disconnects from a player	Black Box	1
43						

44	On new game the gui window does not open in the same place	Window is always in the same spot	Every time you start a new game the gui opens at different screen coordinates	Set default screen X and Y coordinates for the gui	Black Box	1
45	Box colors are occasionally incorrect	Box colors are never incorrect	Sometimes when you uncover a spot some of the boxes are not blue, red or gray	Ensure colors are set properly	Black Box	1
46						
47						
48						
49						
50						